## ABSTRACT OF THE DISCLOSURE

A stream cipher is provided with one or more data bit generators to generate a first, second and third set of data bits. The stream cipher is further provided with a combiner function having a network of shuffle units to combine the third set of data bits, using the first and second sets of data bits as first input data bits and control signals respectively of the network of shuffle units. In one embodiment, the shuffle units are binary shuffle units and they are serially coupled to one another.